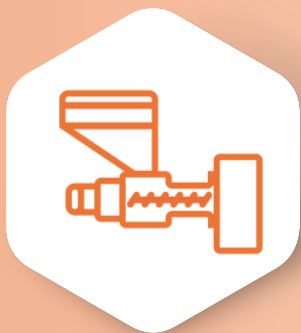




Central conveying systems for the  
process of plastics materials



+35 years of experience

## INNOVATIVE SOLUTIONS

Reception of raw materials

Control, digitalization, traceability of raw materials

Material conveying systems

Drying, dehumidification, mixing of plastics materials

Alimatic, S.L. Sant Boi de Llobregat (Spain).

1987



Alimatic Brasil.

2004



Alimatic Méjico.

2013



Alimatic USA.

2021

2023

Alimatic Digital Lab "ADL"



1999

Representante en Portugal.

2008



Alimatic France.

2019



Alimatic Process Workshop "APW" Manresa.

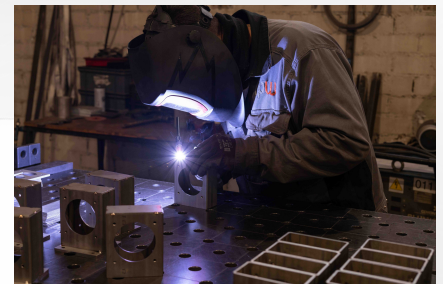
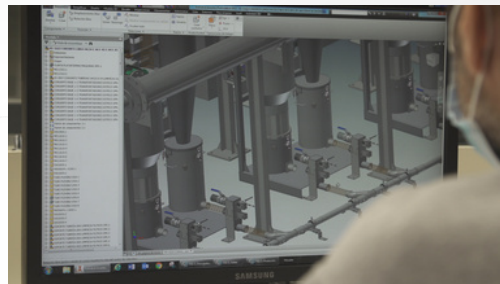
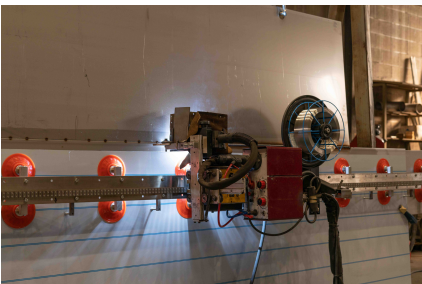
 **alimatic** Group

apw

adl

SPAIN - FRANCE - USA - BRASIL - MEXICO - PORTUGAL

Alimatization  
 engineering  
 customer service  
 technical assistance  
 maintenance of installations  
 spare parts  
 training



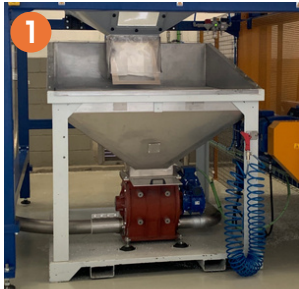
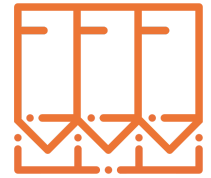
Alimatic is able to provide all of its experience to new installations as well as to enlarge or modify existing central conveying systems.





## STORAGE AND CONVEYING SYSTEMS

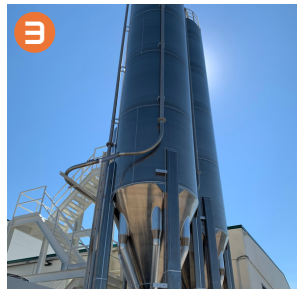
We offer you adapted and efficient solutions to optimize the reception and storage of plastic materials. The material can be received in bags, Octabin, Cistern trucks or even in RailCar unloading system.



**1**  
Pull/Push system  
Capacity: up to 10 ton / hour



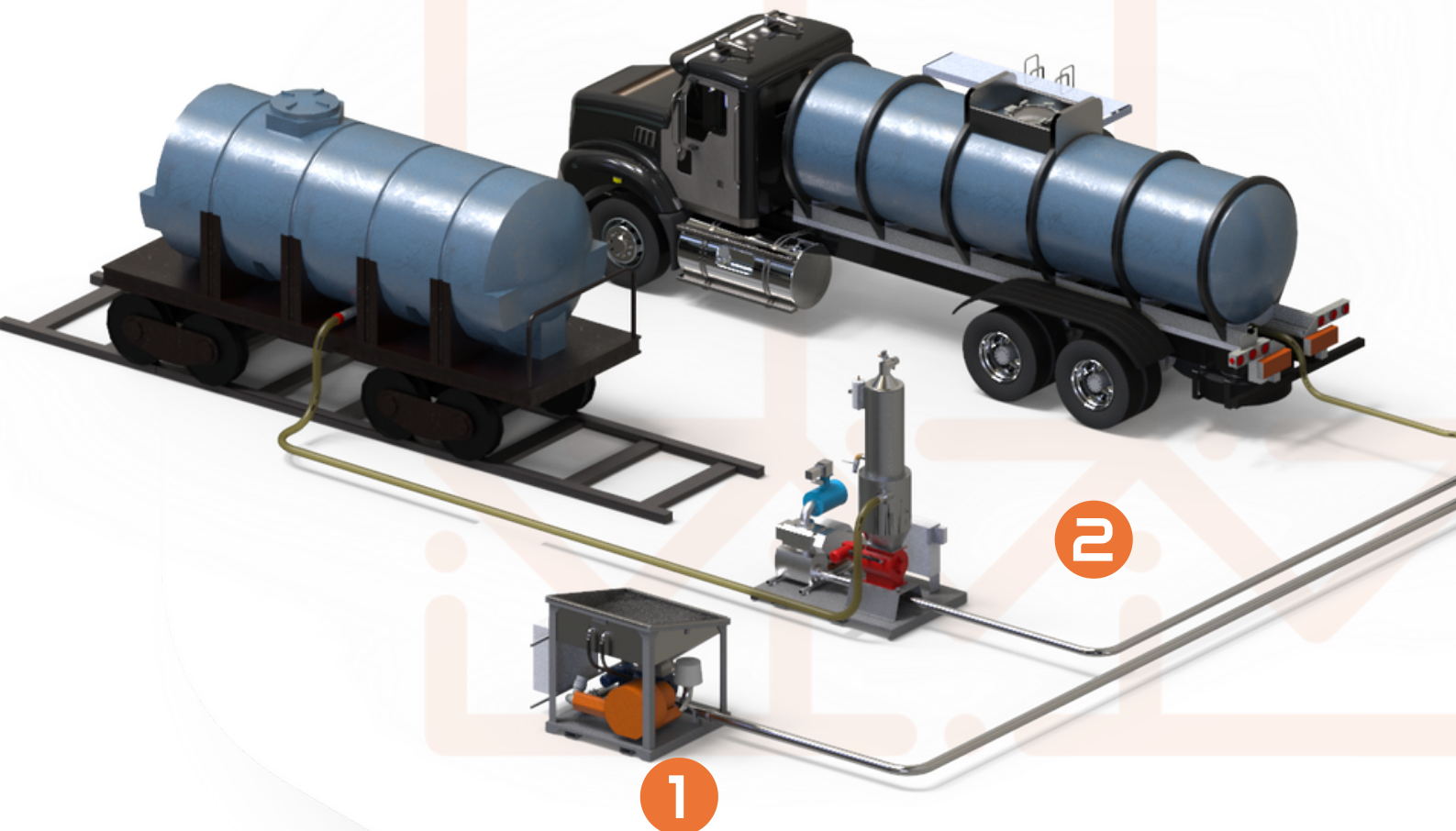
**2**  
RailCar Unloading systems from  
RailCar to Silos.



**3**  
Homogenizing silos



**3**  
Stainless Steel / Aluminium Silos  
Capacity: form 30 to 250 m3







Safety system for Silo Loading



Stock control by weighing (load cells)

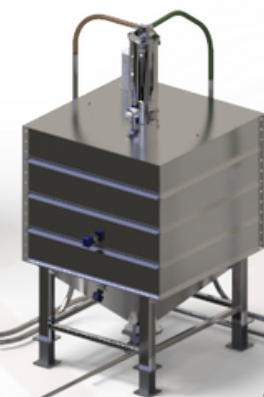


Big-Bag discharge station



Vacuum and filtration group

5

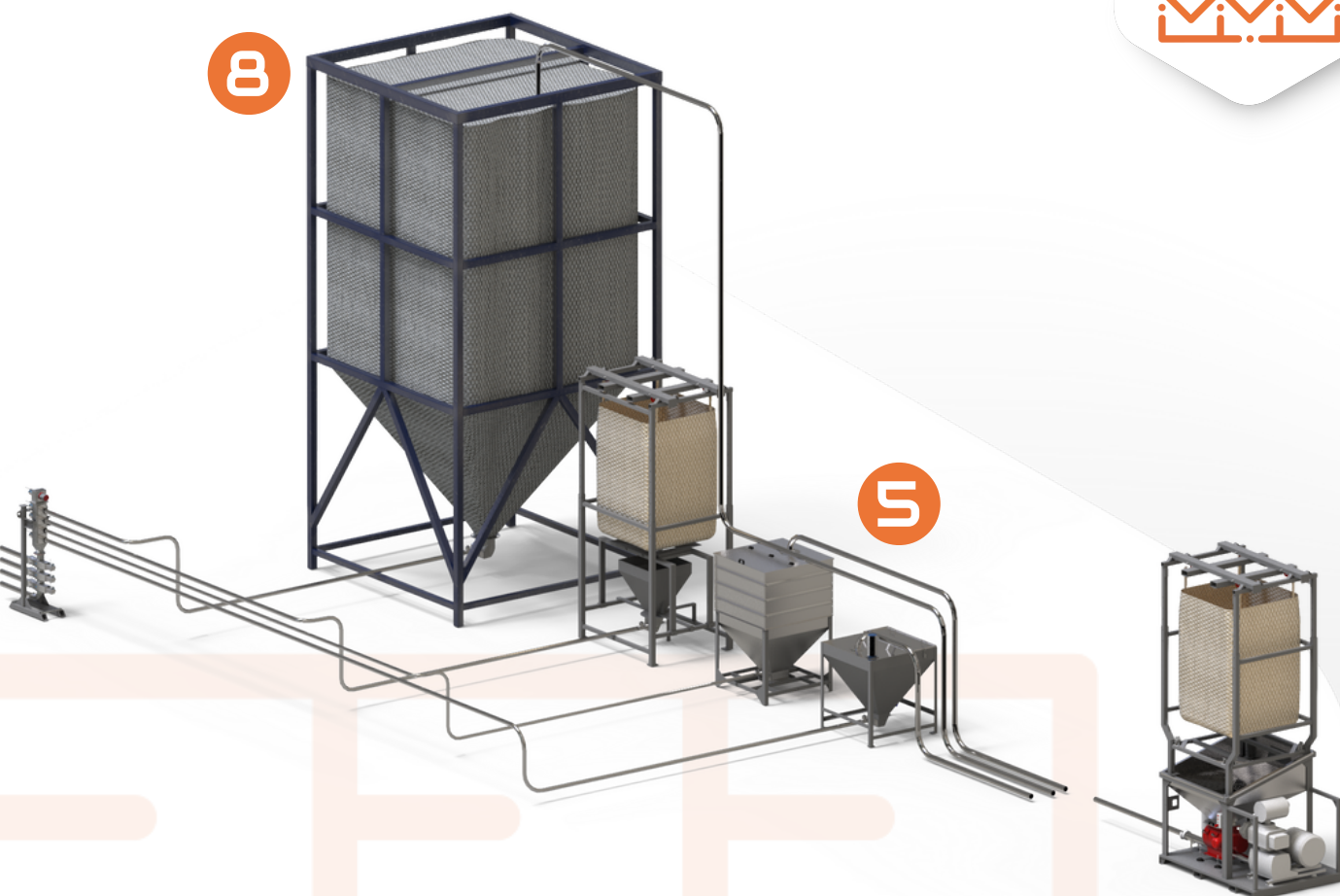


6



7





**Silo loading system**  
Capacity: up to 10 ton / hour



**Modular hoppers/suge bins**  
Capacity: from 30 to 2.000L



**Textil Silos**  
Capacity: up to 50 tons -100 m3

1

The automated sack emptying LABORSAVE is the most advanced on the market.  
Capacity: up to 32 tons/h




## HOPPER LOADERS





Alimatic has a full range of hopper loaders.

- **SINGLE:** Single-phase or Three-phase
  - Individual transport equipment that supplies, quickly and cleanly, different process points as needed
  - It consists of an individual control with a micro PLC and its electrical protections depending on the regulations
  - Power of the vacuum group, which allows the equipment to work individually in an automatic way.
- **VACUUM RECEIVERS**
  - Conveying equipment for connection to a vacuum system and a centralized PLC with different capacities from 2 to 300L.
- **POWDER HOPPER LOADER**
  - Built in stainless steel and with a volume of 30 and 10 liters.
  - Automatic filter cleaning, vacuum valve, antistatic non-return filter, level detector.


 Three phase hopper loader model A-103  
Capacity: 300 kg /h




 Range of Vacuum Receivers

 Single phase Hopper loader model A10  
Capacity: 100 kg / h




 Powder Hoper Loader P30



 Vacuum Receivers applicattion

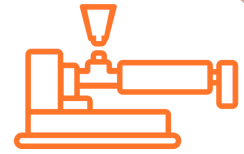


 HALO  
It performs the control of consumption.



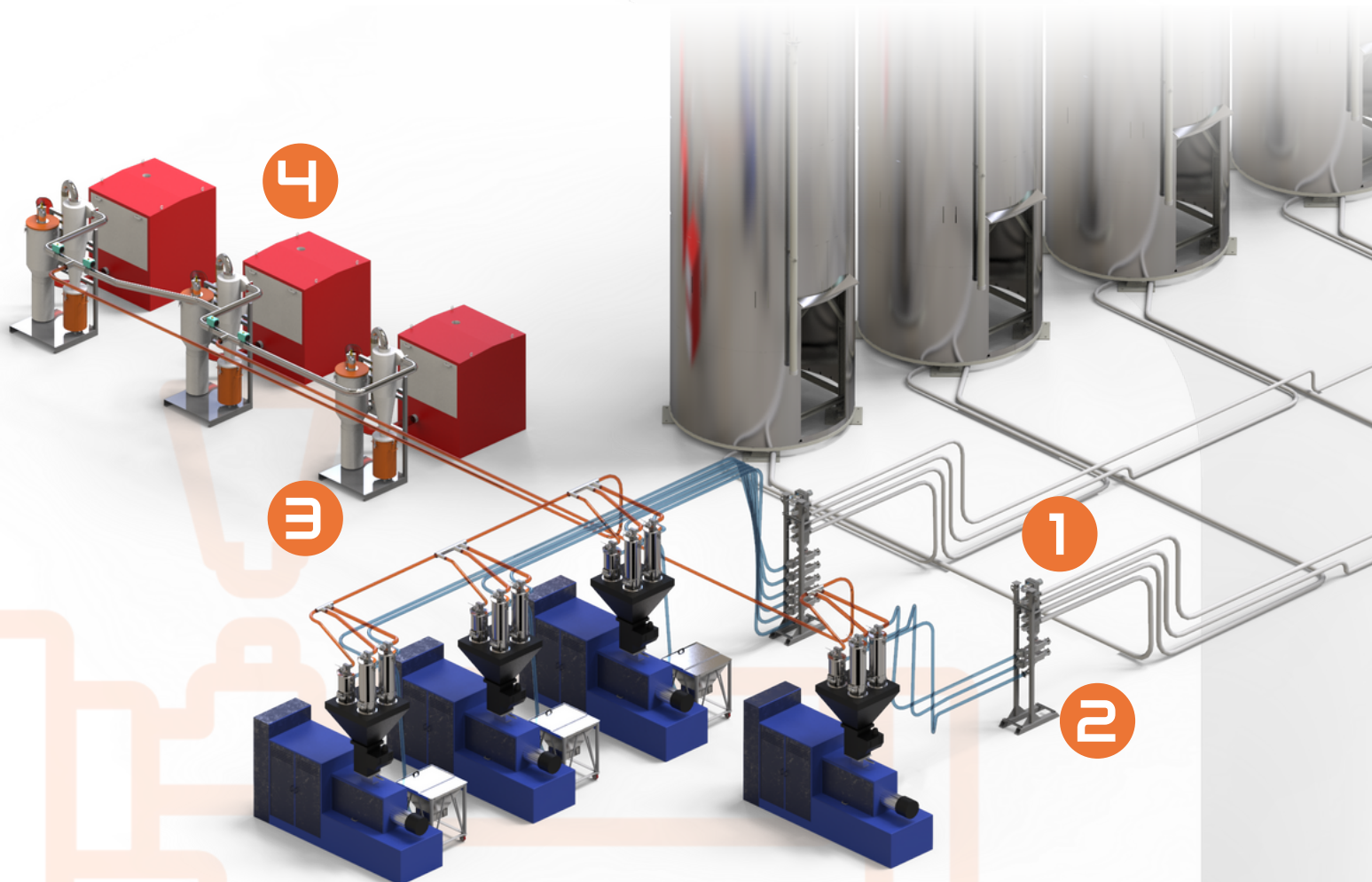


## CENTRAL CONVEYING SYSTEMS



### INJECTION

Conveying system to supply 4 injection molding machines with materials coming from 4 external silos through 2 automatic material selection system (Multiway valve) and 5 and 2 diverter valves respectively.



**Material pipelines & accessories**  
Pipe: Alu / SS / Flexibles / FU / PVC  
Elbows: SS / Anti-abrasive



**Automatic material selection system (Multiway Valve).**



**Central filter system with self-cleaning + cyclone.**



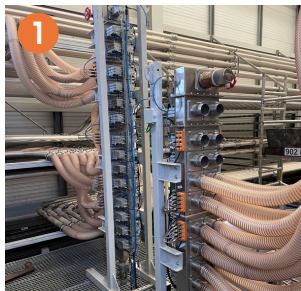
**Vacuum pumps and backup systems**

## CENTRAL CONVEYING SYSTEMS



### EXTRUSION

Conveying system for supplying three-layer extrusion machine from 2 lines; main material in silos and minority material in hopper, with automatic selection through 1 automatic selection valve and 1 diverting valve. The vacuum is generated by a vacuum ring composed of 3 pumps and 4 filters (1 in stand by). With the vacuum ring we obtain significant energy savings.



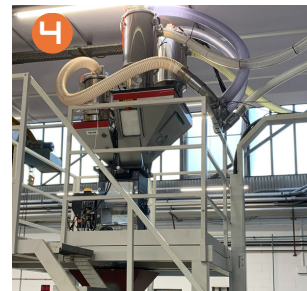
1  
Central material selection valve with purge valve.



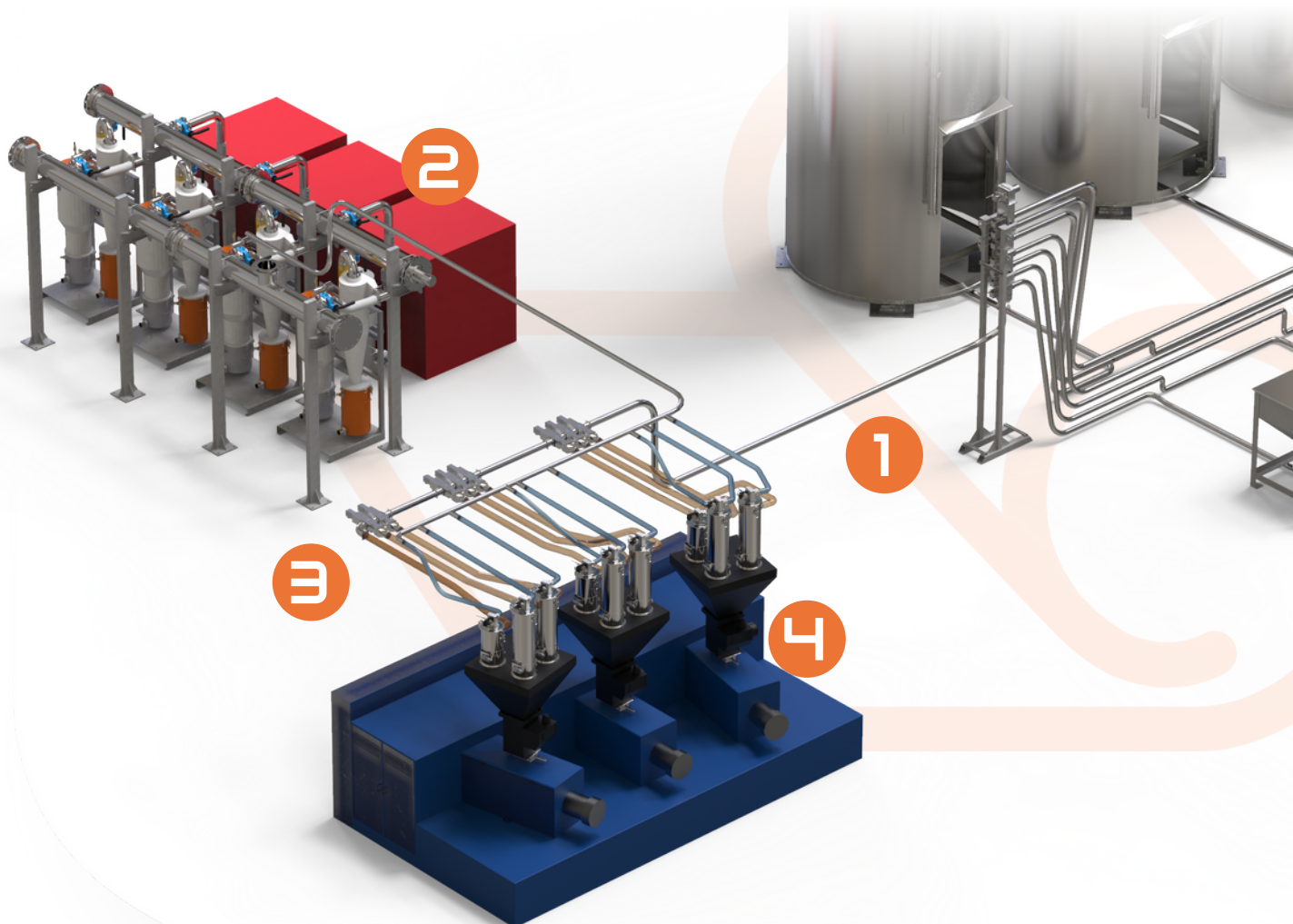
2  
Central vacuum ring (energy saving)



3  
Individual material selection valve (VDL).



4  
Central raw material system and blending components.





## VACUMM RING

Central vacuum system, controlled by central power panel and frequency variators, decoupling the central vacuum from the conveying system.

It provides a significant energy saving by giving service to the whole production plant and it avoids stoppages because all the vacuum units are both working and back up.

### SPECIFICATIONS:

- Control of the whole system via PLC and touch screen.
- Frequency variators to regulate the stop/start of the groups.
- Graphing and viewing of the system and operating status.
- Instant control of system energy consumption.
- Savings in kw. per kg. of material processed.

### OPTIONS:

- Automatic filter cleaning system in semi-automatic mode.
- Data export via ethernet





## CONTROL OF INSTALLATIONS

Alimatic has its own programs for the control and supervision of the installations, by **PLC, PC o Dashboard**.

We offer different types of profiles from operators to supervisors.

### Applications:

- Control of Industrial Equipments and condition monitoring.
- Traceability of raw material conveying system by batch and by manufacturing order.
- Yield analysis
- Transparency of the supply chain.
- Automatic adjustment of conditions according to the production order launched.
- Alert system
- Visualizations per user and profiles.
- Alarm system.

### Benefits:

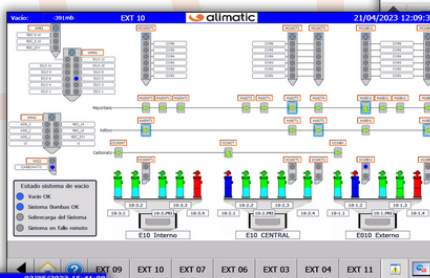
- History of the installation's energy consumption.
- Decrease in human error
- Stock control
- Inverse traceability



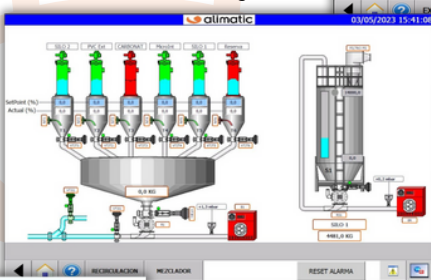
-Integrated gravimetric management.



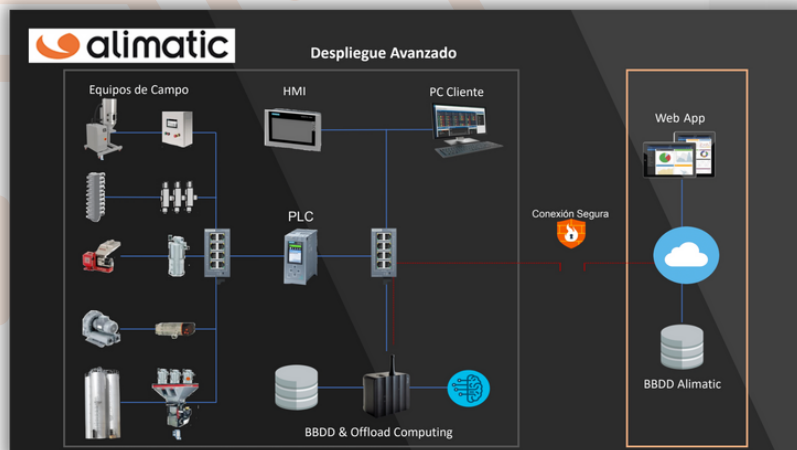
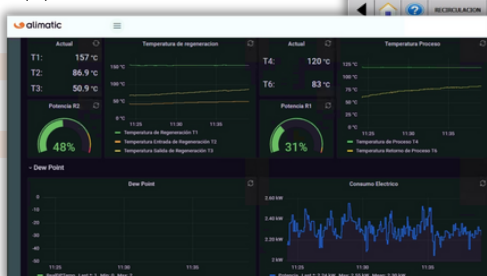
-Management and supervision of automatic material selection



-Batch formulation and dosing



Dashboard control of Alimatic equipments





## DRYERS AND HOT AIR DYERS

The new technology in dehumidification by rotor ADR of ALIMATIC ensures reduction of 98% of dust vs. traditional drying technology.

ALIMATIC ensures optimal control of drying and the viscosity of the material during the process, achieving a reduction of rejects and improved production.



Efficiency

Temperature 60°C to 180°C máx.  
Constant dew point of -60°C

Economy

40% energy saving | With no desiccant silica-gel |  
Frequency converter for adjusting the airflow

Development

Without needing water or compressed air  
Reduction 98% of powder



Moisture meter of  
materials  
On-line analysis of  
moisture levels



Dehumidifiers  
rotary ADR 160  
Capacity: from 15 to  
800 l.  
Touch screen  
display with  
temperature, dew  
point and alarms.



ULTRA FAMILY:  
Vacuum  
dehumidifying  
equipment.  
Low energy  
consumption and  
fast drying.



Dry air dryer  
Capacity: from 30 to  
6.000 l



Dehumidifiers rotary ADR  
250 to 2500  
Capacity: from 300 to 5.000



## DOSING UNITS

Dosing systems and mixing materials in volumetric or gravimetric systems. For dosing one component (Master Batch, additives, powders, etc) as recipes for mixing up to 12 components.

These dosing units can be installed beside the machine or directly above it.

EFFICIENCY

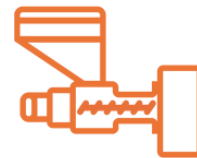
Fast color changes in production lines | Dosing Accuracy  $\pm 0,1\%$  in the mix made. Materials can be dose in pellet or powder.

ECONOMY

Faster pay back and savings in dosage

DEVELOPMENT

Factory integrated system Industry 4.0



### Mc-12/18\* volumetric

Dosing capacity: from 0,07-72 kg/h adjustment manual speed. Autosynchronization with extruder.



### Mc Weight

Self-regulating material measuring system for extruders.



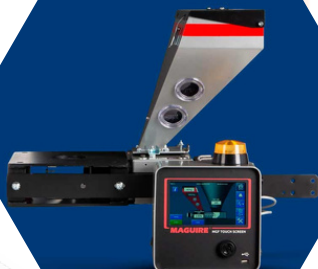
### Mc-Balance gravimetric

Dosing capacity: 0.07-180 kg/h. Continuous measurement by weight loss



### MGF - gravimetric

Dosing capacity: from 0.05 to 18 kg/h  
For Injection / Extrusion  
Automatic adjustments of  $\pm 0,2\%$  of the ratio

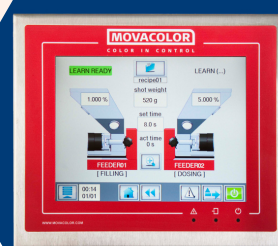


### MC-POWDER

Dosing unit for powder.



### Touch Screen Control





## GRAVIMETRIC BLENDERS

The Maguire gravimetric blenders have the ability to mix different types of materials in pellet or recipes like virgin + regrind + color + additive and also can dispense in the recipe, powder or pigment, and if it is necessary, a liquid color or liquid additive in the same recipe.



Once the batch of components is done, it is mixed to provide stability and homogeneity to the process.

### EFFICIENCY

More than 50,000 blenders sold worldwide | 78 models available from 50 to 3000 kg / h | Dosage of 4 to 12 components | Monitoring and metering all components of the recipe constantly

### ECONOMY

Savings in the consumption of MB/ADD & more stability in the set-up of the machine | Quick paybac | Very simple operation less operator time

### DEVELOPMENT

Administration & Software Control for Industry 4.0 | Automatic recalibration batch to batch | Integration into central system via PLC for complete data acquisition

Blending equipment.  
Extrusion control  
Capacity 150Kg/H



-Blending equipment  
Maguire

WSB MP with  
elevator  
Production: up to  
90 kg / h



WSB 3060 up to  
3,600 kg / h for  
special mixtures  
with sawdust,  
CaCO<sub>3</sub>, WPC



WSB 940 with 4  
components  
Production: up to  
1,200 kg / h



WSB 240 Touch  
screen  
Production rate:  
up to 240 kg / h



WSB 1200  
Production: up to 1400 kg / h





## SPECIAL APPLICATIONS

In ALIMATIC we perform studies, realize projects and special conveying applications of materials in pellets, powders, storage, drying specialized materials, software integrations and data acquisition of the elements in the project.

EFFICIENCY

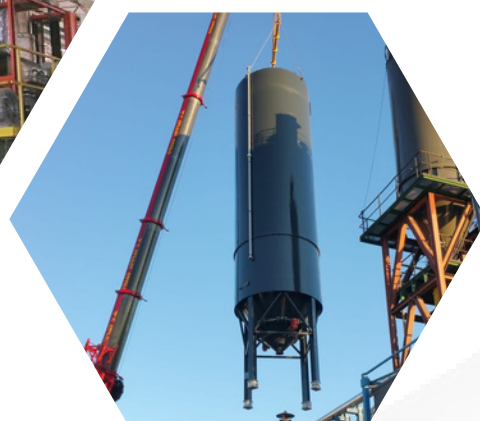
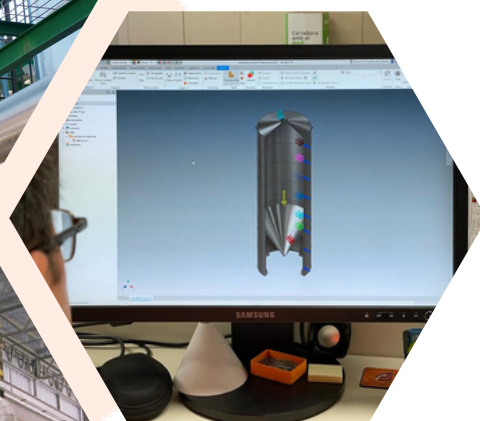
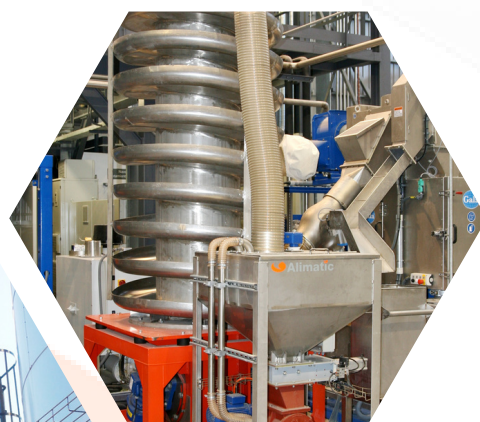
Study and adaptation to customer requirements

ECONOMY

Savings in materials handling  
Optimal management of stocks

DEVELOPMENT

Project management  
Keys in hand systems



Our partners:

**MAGUIRE**<sup>®</sup>  
*Intelligent Simplicity*

**LaborSave**<sup>™</sup>

**ZEPPELIN**<sup>®</sup>  
Systems

**MOVACOLOR**

#### AUTOMATIC HANDLING SYSTEMS



C/ Andorra, 19 B-C  
08830 Sant Boi de Llobregat (Barcelona)  
España



+34 936 525 680



alimatic@alimatic.com



@Alimatic\_SL



ALIMATIC FRANCIA  
pthomas@alimatic.com



ALIMATIC BRASIL  
acorradi@alimatic.com.br



ALIMATIC, S.L. DE C.V. - MEXICO  
rpaz@alimatic.com



ALIMATIC, USA  
alimatic@alimatic.com